University of Kalyani

Tender Ref No: NIT/KU/CIRM/CCU/JUL - 2010 Dated: 28.07.10

Sealed tenders are invited from reputed suppliers for the procurement of desktop, printer, scanner etc to CIRM.

Last date of submitting the tender – 17.08.10 (Tuesday)

Please visit our website www.klyuniv.ac.in for the details.

Registrar

UNIVERSITY OF KALYANI

TENDER DOCUMENT

Tender No: NIT/KU/CIRM/CCU/JUL- 2010 Dated: 28.07.10

FOR

PROCUREMENT OF DESKTOP, LAPTOP, PRINTER, & SCANNER ETC.

UNIVERSITY OF KALYANI
Tender Documents

Cash Receipt/Bank Draft No……

Date……..

1. Name of the Vendor: …… …….. .....

2. Address with telephone No. : …… ……...
…… …….
…… …….

3. Cost of tender paper: (to be deposited along with tender document)

a) Bank Draft No……..…… ……..
b) Date…… ……
c) for Rs…… …….
d) Drawn on …… ……

4. The tender documents complete in all respect along with cost of tender paper should reach to the Office of the CIRM, University of Kalyani, Kalyani, Nadia on or **before 17th August(Tuesday), 2010 by 2.00 pm. The tender paper will be opened on the same date at 3pm in presence of intending tenderer .**

Scope of work

The work to be rendered by the Vender under this tender/ agreement is supply, delivery and installation and commissioning of the sold equipments and training at the users' premises. The tender should include the installation material wherever required.

Terms & Conditions

1. The tenderer must be required an amount of **Rs 500/-(Five hundred only)** to be submitted as the cost of the tender paper and **Rs 5,000 (Five thousand only)** for earnest money through Bank demand draft drawn in favor of '**University of Kalyani' payable at Kalyani** . No tender shall be accepted without the Earnest Money & cost of Tender Paper.

2. Non-refundable draft of an amount of **Rs. 500/-(Five hundred only**) submitted along with the tender document as cost of tender paper and refundable draft of **Rs. 5,000(Five thousand only)** for earnest money.

3. Full payment will be made through A/C payee cheque against submitted bill after suppl y, installation and joint installation report of all items of the tender.

4. The rates should be valid for at least three (3) months.

5. The rates should be quoted in words as well as in figures in respect of each item.

6. Prices shall be quoted in Indian rupee only, including all taxes.

7. All essential items including cables, connectors, etc. needed for the smooth operation /installation of the equipment shall be assumed to have been included in the quoted price/items if these have not been quoted separately.

8. Installation, testing and commissioning & integration of the components/ equipment in our existing KU-LAN of the purchased items is to be done by supplier at the site. Charges on account of installation and commissioning, if any, should be quoted separately.

9. The supplier/manufacturer should quote the academic/educational prices of the software /hardware both.

10. Clause by clause compliance with the technical specification/Model/Make in this tender is required.

11. Technical specification/Model/Make shall be strictly as per the requirements laid down.

12. Most of the manufacturers offer education discount while offering equipment to Educational Institutions world over. The tenders should therefore also, offer such discount while quoting prices against the tender.

13. Vendor(s) supplying part/disjoint equipment should have the responsibility of integrating the same into the existing system/KULAN in consultation of other vendor(s) supplying part/disjoint equipments.

14. Previous experience of for similar type of job must be submitted along with the proof of documents at least one in last two years.

15. Standard warranty for software with up gradation facility, 3 years comprehensive on site (3/3/3-Part/Technician/ Onsite) warranty for equipment.

16. Period of delivery: Should be within 21 days from the date of issuing of purchase order against our tender reference no.

17. The vendor should quote and be capable to supply all the necessary accessories for the equipment. However, the university has the right to procure a part or a whole of equipment.

18. Warranty: The manufacturer should give guarantee/warrantee for a period not less than one year. If the equipment installed at one location is subsequently shifted to another location, the warranty services shall continue to be provided at new location without any additional financial implications. Undertaking that during warranty period, if any defect in the supplied equipment is noticed by the Purchaser, the supplier or his representative shall rectify the defect or replace the defective item free of cost at the Purchaser's site at the earliest possible, latest within a period of 30 days of notification.

19. After Sales Service

(i) The name and complete address of the company in India authorized by the manufacturer, to provide after sales service for the equipment should be mentioned. The appointed authorized service provider should be holding a valid certificate from the manufacturer to this effect.

(ii) The manufacturer should give an undertaking that after the warranty period, they shall provide spares and after sale service of the equipment in India for the normal life time of the equipment.

20. The bidder should have enough infrastructure as well as qualified personnel to maintain the highly sophisticated equipment as mentioned. ISO certificate (if any) should be enclosed with the tender documents.

21. University of Kalyani reserve the right to purchase varying quantity of material, less or more than the quantity specified in the tender.

22. The University of Kalyani reserves the right to reject any/all tenders or cancel the accepted tenders without assigning any reason.

23. Tender paper should be signed in all pages with seal and rate of each item should be entered in the tender form in the specified pages of the tender. Total amount should be calculate and entered in the sheet included in the tenders.

24. Tenderers should quote all items of the tender annexure wise. Offer for separate annexure will be accepted. Partial quoting within the annexure will not be accepted.

25. Tenders will be opened in presence of intending tenderers or their representative(s).

26. The tender should be prepared & submitted after carefully perusing the complete tender document (including the guidelines, instructions, terms and conditions, nature & scope of work, specifications of the equipment to be supplied & work to be performed, etc.)

27. The specifications of the equipments are enclosed as Annexure-I, Annexure-II, Annexure-III, Annexure-IV, Annexure-V, Annexure-VI.

28. Price quote for all items must be given as per format of the Price Bid in company's letterhead with signature & seal.

29. Please note that the University reserves the right to select the vendor for placing supply order and lowest quotation does not guarantee for selection of vendor.

30. Please quote all price/s inclusive of all taxes and duties.

31. Bidder must submit relevant documents for latest IT/VAT and Service Tax clearance certificate.

32. Quantity of items to be procured on the basis of amount quoted by responsive bidder as selected by the university subject to the availability of the fund

33. We look forward to receiving your quotations and thank for your interest in this project.

Place:

Date

Name and Signature of the Tenderer
With seal of the Company

ANNEXURE- I

SPECIFICATION FOR DESKTOP:

(a) Specification of DELL Optiplex Desktop Computer	
Qty Required – 35(approx)	
Item	**Description of Requirement**
Chipset	Integrated Intel(R) G41 Express Chipset w/ICH7
Processor	Intel(R) Core(TM) 2 Duo Processor E8400(3.0GHz/13 49 ,33FSB
Cache	6M L2 cache
FSB	1333FSB
Memory	3GB NECC DDR3 1333MHz SDRAM Memory
Hard Disk Drive & controller	320GB 7.2k RPM SATA Hard Drive
Optical Drive	16X Max DVD + /- RW with Dual Layer Write Capabil ities for MT & DT
Graphics	Integrated Intel(R) Graphics Media Accelerator X4 500
Audio	Integrated Realtek ALC269Q High Definition Audio
Ethernet	Integrated Broadcom (BCM57780) Gigabit LAN 10/100 /1000
Form Factor	MT
Power Supply	220-240V
Keyboard	USB Entry Keyboard (US version)
Mouse	Optical USB Mouse (Black
Operating System	Genuine Windows(R) 7 Professional 32 bit (English) -End User License Agreement (English)
Recovery Tool	Recovery CD Media
Manageability	Telephone Technical Support Assistance (9am To 6pm, Monday To Friday) NBD Onsite Labor Service only support limited OCSR parts replacement For more detail, refer to Customer Self Repair we bpage in support website Desktop-DT Handling & Insurance Charges Delivery Charges(India)
Security	Pad Lock Support Bios /Setup password Hood Sensor (Should be available as option)
Compliance And Certification to be submitted	SMARTServices ProSupport LabelProSupport IT Label,EPEAT Gold,UL & FCC, ICC
Display Screen	17 " E1709W Wide Screen Flat Panel LCD Monit Power Cord (INDIA
Warranty	5 Yrs Next Business Day Onsite Service

ANNEXURE- II

SPECIFICATION FOR PRINTER/SCANNER/CARTRIDGE etc.

(a) Specification of HP LaserJet Printer	
Qty Required – 1 (approx)	
Item	**Description of Requirement**
HP LaserJet CP 2025dn	Print speed, black, Color (normal quality mode) Up to 21 ppm Print resolution, Up to 600 x 600 dpi Processor speed 540 MHz Memory, standard 128 MB Duplex printing (printing on both sides of paper) Automatic (standard) Connectivity, standard Hi-Speed USB port; built-in Fast Ethernet 10/100Base-TX

(b) Specification of HP Flatbed Scanner	
Qty Required - 1(approx)	
Item	**Description of Requirement**
HP SJ8270 Flatbed Scanner	Optical scanning resolution Up to 4800 dpi Enhanced scanning resolution Up to 999,999 dpi Scan speed (ADF) Up to 25 ppm Maximum scanning size 216 x 356 mm

(c) Specification of HP LaserJet Print Cartridge Q2612A	
Qty Required - 1(approx)	
Item	**Description of Requirement**
HP LaserJet Print Cartridge Q2612A	Advanced HP toner formula for reliable, cost-effective and sharp, professional results Average cartridge yield: 2,000 standard pages. Declared yield value in accordance with ISO/IEC 19752. Operating humidity: 20 to 80% RH, Storage humidity:10 to 90% RH, Operating temperature:45.5 to 90.5° F Storage temperature : -4 to 104° F

(d) Specification of Western Digital My book Essential	
Qty Required - 1(approx)	
Item	**Description of Requirement**
Western Digital My book Essential (External Hard Drive)	8 MB Cache, Capacity 1TB ,Form Factor 3.5",Interface USB 2.0, RPM 5400 rpm

(e) Specification of ScanDisk Cruzer USB Flash Drive	
Qty Required - 2(approx)	
Item	**Description of Requirement**
ScanDisk Cruzer USB Flash Drive	Capacity : 32 GB

ANNEXURE III

SPECIFICATION FOR LCD MONITOR/ LAPTOP/ HANDYCAM /DIGITAL READER

a) **Specification of SONY Digital Still Camera - Series T Model DSC-TX7/S**	
Qty Required - 1**(approx)**	
Item	**Description of Requirement**
Gross Pixels	Approx. 10.6 Mega Pixels
Processor	BIONZ
Sensor Type	1/2.4 Exmor R CMOS Sensor
Optical Zoom	4x
Precision Digital Zoom	8x (approx)
Optical Zoom During Movie Recording	Yes
Lens	Carl Zeiss Vario-Tessar
Auto Focus Range	iAuto (W: Approx. 1cm to Infinity, T: Approx. 50cm to Infin ity) / Program Auto (W: Approx. 8cm to Infinity, T: Approx. 50cm to Infinity)
Compatible Recording Media	Memory Stick Duo / Memory Stick PRO Duo / Memory Stick PRO Duo (High Speed) / Memory Stick PRO-HG Duo / SD Memory Card / SDHC Memory Card
LCD	3.5 (8.9 cm) (921K pixels), Xtra Fine TruBlack, Touch Screen
Stamina (Battery Life)	230 shots / 115mins
Battery System	Lithium ION Battery
Photo Mode	Intelligent Auto, Easy Shooting, Program Auto, Intelligent Sweep Panorama, Handheld Twilight, Anti-Motion Blur, Scene Selection
Still Image Size 10M	3,648 x 2,736
Movie Recording Mode (1080i Fine)	1920 x 1080, 50i, Approx. 17Mbps
Recording Format	AVCHD / MPEG4
Still Image Recording Mode	Normal (JPEG) / Hi-Speed Burst
Focus Mode	Multi-point AF (9 points) / Center-weighted AF / Spot AF / Flexible Spot AF
Auto Focus Mode	Intelligent
Flash Mode	Auto, Flash On, Flash Off, Slow Synchro
Flash Range	ISO Auto: 0.08 - 3.8m (W) / Approx. 0.5 - 3.1m (T), ISO3200: up to 8.0m (W) / 6.3m (T)
Playback Moving Image Mode	Play back own recorded movie files only
Slide Show Effect	Transition Effect (Simple / Active / Nostalgic / Stylish), Music (4 Tunes)
Multi-use Terminal	Yes (AV / HDMI / USB / DC)
Supplied Accessories	
Power Cord	Yes
Battery	Yes
Battery Charger	Yes
HDMI Cable	Yes
AV Cable	Yes
USB Cable	Yes
Wrist Strip	yes
Paint Pen	Yes

Application Software	Picture Motion Browser

(b) Specification of LAPTOP SONY VAIO- S Series - Model VPCS123FG/B

Qty Required - 1(approx)

Item	Description of Requirement

SONY VAIO S Series (Black) – Model VPCS123FG/B

Intel® Core™ i3-350M Processor 2.26 GHz, Intel® HM55 Express Chipset, 1066 MHz, 3 MB (L3 Cache), 4 GB DDR3 SDRAM*2 (upgradeable up to 8 GB*3), 320 GB *4 (Serial ATA, 5400 rpm), DVD±RW/±R DL/RAM Drive, Intel® HD Graphics, 13.3 (33.8 cm) wide (WXGA: 1366 x 768) TFT co lour display (VAIO Display, LED backlight), Windows® 7 Home Premium (64 -bit), 10Base-T/100Base-TX/1000Base-T, SD Memory Card (SDHC compatible, Copyright protection function (CPRM)), Integrated Wireless LAN IEEE 802.11a/b/g/n, Approx. 19 mm key pitch / 1.7 mm keystroke , 86 keys , Backlit Keyboard, Intel® High Definition Audio compatible , 3D audio (Direct Sound 3D support), Built -in stereo speakers, Built -in monaural microphone, Maximum Reading Speed: DVD+R: 8x (SL), 8x (DL)/DVD -R: 8x (SL), 8x (DL)/DVD+RW: 8x/DVD-RW: 8x/DVD-ROM: 8x/DVD-RAM: 5x/CD-ROM: 24x/CD-R: 24x/CD-RW: 24x

Maximum Writing Speed: DVD+R: 8x (SL), 4x (DL)/DVD -R: 8x (SL), 4x (DL)DVD+RW: 8x/DVD -RW: 6x/DVD-RAM: 5x/CD-R: 24x/CD-RW: 10x

Front Side Camera : Effective pixels: 640 x 480, Intelligent Touchpad (Gesture supported)

Bundled Battery: VGP-BPS21A Lithium-ion battery: up to 4 hours of use . AC Adaptor (VGP -AC19V44 or VGP-AC19V48)

Specification of Supplied Accessories

b-1) Sony Bluetooth® Laser Mouse (Blue) - VGP-BMS15/L----------Qty-1.
b-2) Sony External USB Memory Card Reader / Writer (Dark Bl ue) MRW62E-S2/B----------Qty-1.
b-3) Sony 16GB Memory Stick PRO -HG Duo HX-MS-HX16G---------- ------Qty-1
b-4) Sony HDMI cable---------- ---Qty1.

(c) Specification of Sony LCD Monitor- Model No. GXDL52H1 52”	
Qty Required - 1**(approx)**	
Item	**Description of Requirement**
Diagonal Size	52" (132cm) Diagonal
Resolution	1920x1080
Aspect Ratio	16:9
Viewing Angle	178°
Color System	NTSC,PAL,SECAM
Inputs	S-Video ,RGB, Composite,HDMI1.1
Power Supply	100-240 V, 380W
Warranty	3 Years
Supplied Accessories	
Serial Cable	Yes
HDMI Cable	Yes
Audio Cable	Yes
S-Video Cable	Yes

(d)Specification of Sony Digital Reader Touch Edition -Model No. PRS 600 RC	
Qty Required - 2**(approx)**	
Item	**Description of Requirement**
Display	Screen Size: Vizplex 6 inches Resolution: 800 x 600 pixels Gray Scale: 8-levels gray scal
Operating Conditions	Operating Temperature: 41 to 95 ° F
Power	Battery Type: Rechargeable Lithium-Ion battery: DC 3.7 V AC Power: DC 5.2 V Battery Life (Approx): 7,500 (BBeB Book) Continuous page turns; 6,800 (EPUB) Continuous page turns
Media Formats Supported	Unsecured Text: EPUB file (Non DRM/ Adobe DRM prote cted) BBeB Book (Non DRM/ PRS DRM protected) PDF file (Non DRM/ Adobe DRM protected) DRM Text: Text file RTF file Word file (unsecured) Unsecured Audio: MP3 (Non encrypted) AAC (Non encrypted) Image: JPEG PNG GIF BMP

System Requirements	Processor: i.MX31L (TO 2.0.1)
Dimensions	Weight: Approx. 10.1 oz Measurements: 6.9 x 4.8 x .4 inches (LxWxD)
Supplied Accessories	USB Cable, Head Phone AC Adaptor: AC-S5220E Car Charger: PRSA-CC1 Soft Cover: PRSA-SC6 Cover with Light: PRSA-CL6 Stylus Pack: P RAS-SP1
Color	Red

ANNEXURE IV

*If Fully Complied please write below **Yes**. If not fully complied or partially complied please write **No**
** Please mention where the same is available in the brochure; and highlight the same in the document mentioning Page Number

Please note that if any mismatch is see between techn ical compliance and documents provided, then tender will be rejected without recourse

Sl	Parameter	Required Specifications	Fully Complied (Yes/No)*
1	**Manufacturer's Credentials**	Manufacturer of the UPS systems should be ISO 9001:2008 certified. Please enclose certificate	
		Manufacturer of the UPS systems should be ISO 14001 certified. Please enclose certificate	
		If Manufacturer quotes through a dealer then the dealer must authorized by the manufacturer to quote for this particular tender.	
2	**Experience of Bidder**	The Bidder must enclose • PAN Card Copy • Service Tax Registration Certificate • VAT Registration Certificate • Income Tax Return (ITR-5) Filed for Assessment Year 2009-10 • Last Service Tax Return Filed • VAT & CST Return for the last Quarter Without these documents the tender will be rejected outright	
3	**Model Number and Make**	Please mention the Model Number of the UPS offered. Please mention the make of UPS system. Please provide brochure for this particular offered UPS System	
4	**Special Additional Features Mandatorily Required**	UPS should be Digital Signal Processor based. Please mention make and model of DSP Chip.	
		UPS Should be with inbuilt Isolation Transformer at the Outsput Side. This transformer will be housed inside the UPS cubicle and should be part of design. Please do not provide external/optional Isolation Transformer Model UPS Systems	
		UPS should have LCD Display for monitoring systems paramters like Input / Output Voltages. Load in KVA and KW, Frequency	

		A 25kA Three Phase Transient Voltage Surge Suppressor with all mode protection will have to be supplied at the Input of the UPS system. The device is to **be UL rated** with fault clearance in < 0.5 nano seonds. MOV based systems are not accepted. Please enclosed brochure of the systems for ready reference.	
		UPS Should have Self Diagnostic Features and it should annunciate system faults like Output Short Circuit, Over Temperature, Rectifier Short Circuit etc	
		UPS should have automatic phase correction Facility. In case there is a change in input phase sequence of UPS then UPS should change the IGBT gating sequence and correct phase automatically	

a) Technical Specification for Super 400D 20KVA Emerson make Liebert brand UPS system with three phase input & output with inbuilt Isolation Transformer with 26 Nos 40AH -12V SMF Batteries for 30 mins battery backup including racks and accessories

DETAILS SPECIFICATION	
Items	**Description**
UPS Single Line Diagram	Please provide a Single Line Diagram of the UPS system being Offered c learly showing. All these are mandatory requirements 1. Inverter 2. Batteries 3. Rectifier 4. Isolation Transformer 5. Static Switch& Maintenance Bypass
Input Parameters	Rectifier should be IGBT based
	Input Voltage should be nominal 415 VAC
	Input Voltage Range should be -30%, + 25%
	Input Frequency should be nominal 50 Hz
	Input Frequency Variation should be ± 10%
	Input Power Factor should be > 0.99 with a Progressive Power Walk in of 10 secs minimum
Output Parameters	Output Power Rating should be 20 KVA and 16 KW
	Output Voltage should be 220/230/240 VAC 1 Phase with a regulation of ± 1%

	Crest Factor should be minimum 3:1
	THD < 2% for 100% Linear Load and < 3% for Non Linear Load
	Overload should be 110% for 60 mins 125% for 10 mins 150% for 1 mins
	Transfer Time to bypass should be 0 msecs in sync mode and 20 msecs max in non sync mode
DC Parameters	Nominal DC Battery voltage should be minimum 300 VDC. Please do not quote systems with lower than 300 VDC.
	Minimum 7 Amps Battery Charger Required. UPS sho uld support SMF VRLA batteries
	Battery VAH should not be less than 13100 VAH for 30 mins battery backup
	Battery Rack and Interlink Cables should be provided for above batteries
Environmental Parameters	UPS should be able to operate between ambient of 0-45 deg C and 95% Relative Humidity Non Condensing

b) Technical Specification for 2 KVA Emersion make Liebert GXT MT+ with interlink cable and Rack of 60 Mins battery backup. Including battery rack and interlink cable

DETAILS SPECIFICATION	
Items	**Description**
OUTPUT PARAMETERS	
Capacity	2kVA / 1600W
Power Factor	0.8
Nominal Voltage	220 / 230 / 240 Vac
Voltage THD	<=4% - Linear Load <=7% - Non Linear load
Frequency Regulation - Free Run (Unsynchronised with bypass)	+ / - 0.5 Hz
Frequency Regulation (Synchronised with bypass)	47.5 to 52.5 HZ / 57.5 to 62.5 HZ
Creast Factor	3:1 max.
AC - AC Efficiency	88% R-Load, 87% RCD - Load
Transfer time - Mains to battery	0 millisec
Transfer time - Inverter to bypass - Synchronisation mode	4 msec
INPUT PARAMETERS	
Configuration	1 phase, L-N + PE
Nominal Voltage	230 Vac

Voltage range	160V to 300V at 100% Load, At 60% Load 110V to 300 Vac
Frequency	50 / 60 Hz
Frequency range - Hz	40 - 70 Hz
Power Factor	>=0.95
BATTERY CHARGER	
Nominal Voltage - Float	108 Vdc
Maximum charging current - STD. / LB.	1A - STD and 4 / 8 A - LB
BATTERY PARAMETERS	
Type	SMF
No. of battery blocks	8
Battery Voltage	96 V
ENVIRONMENTAL PARAMETERS	
Operating temperature	0 to 40 deg. centigrade
Storage temperature	-20 to 50 deg. centigrade
Noise level	<45db
MECHANICAL PARAMETERS	
Height X Width X Depth (MM)	318 X 190 X 387
Weight	26 kg. - STD., 13 kg. - LB
Colour / Panel finish	RAL 7016 dark grey
Protection	IP20
Communication Port	RS232, USB
EPO	Yes
MONITORING SOFTWARE	SNMP, dry contact card, UPSilon 2000
STANDARDS	
EMI	EN 62040-2: 2006
SAFETY	EN 62040-1-1: 2003
PERFORMANCE (technical feature)	IEC / EN 62040 - 3

ANNEXURE-V

SPECIFICATION FOR OTHER PERIPHERIAL & NETWORK EQUIPMENT

(a) Specification of Passive Components

Item	Description of Requirements
CAT6 UTP Cable	Molex Cat6 Cable Box (305 Mtrs. per BOX) - Qty-4
CAT6 Patch Panel	Molex Cat6 24 port Jack panel - Qty-2
7 Feet Patch Cord	Molex Cat6 7 Feet Patch Cord - Qty-35
3 Feet Patch Cord	Molex Cat6 3 Feet Patch Cord - Qty-37
I/O with SMB	Molex Cat6 I/O with Face plate Single and SMB - Qty-35
Equipment Rack	VALRACK 22U 19" Steel Glass Door Floor Mount Rack with Hardware Front Panel - Qty-1
PVC PIPE	1" PVC PIPE with accessories - Qty-400 Mtrs.
Integration	UTP Cable Laying charges - Qty-1220 Mtrs.
Integration	PVC Pipe Laying charges - Qty-400 Mtrs.
Integration	I/O Impacting charges - Qty-35
Integration	Patch Panel Fixing charges - Qty-2
Integration	Rack Installation charges - Qty-1

(b)Specification of HP-Networking (2510-48)Layer-2, 48 port Switch

Qty Required – 1(approx)

Item	Description of Requirement
Ports	48 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) Media Type: Auto-MDIX Duplex: half or full 2 RJ-45 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T) Media Type: Auto-MDIX Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only 1 RJ-45 serial console port 2 open mini-GBIC (SFP) slots
Memory and Processor	MIPS 32 @ 300 MHz, 16 MB flash, 128 MB SDRAM; packet buffer size: 512 KB MIPS @ 264 MHz, 16 MB flash, 64 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance	< 4.9 µs (64-byte packets) < 2.6 µs (64-byte packets) up to 13 million pps (64-byte packets) 17.6 Gbps 8000 entries
Electrical characteristics	92 BTU/hr (97 kJ/hr)

	100-127 / 200-240 VAC 50 / 60 Hz 1.2 / 0.7 A 27 W
Safety	CUL (CSA 22.2 No. 60950) UL 60950-1 IEC 60950 EN 60950
Emissions	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A; IEC/EN 61000 -3-2; IEC/EN 61000-3-3
Immunity	Generic: EN 55024, CISPR 24 ESD: IEC 61000-4-2 Radiated: IEC 61000-4-3 EFT/Burst: IEC 61000-4-4 Surge: IEC 61000-4-5 Conducted: IEC 61000-4-6 Power frequency magnetic field: IEC 61000-4-8 Voltage dips and interruptions: IEC 61000-4-11 Harmonics: EN 61000-3-2, IEC 61000-3-2 Flicker: EN 61000-3-3, IEC 61000-3-3
Standards and protocols	RFC 1591 DNS (client) HTML and telnet management IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3x Flow Control RFC 2236 IGMPv2 RFC 1213 MIB II RFC 1493 Bridge MIB RFC 1573 SNMP MIB II IEEE 802.1AB Link Layer Discovery Protocol (LLDP) SNMPv1/v2c/v3 IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication Secure Sockets Layer (SSL) SSHv1/SSHv2 Secure Shell

(c) Specification of Cisco 2821 Integrated Service Router

Item	Description of Requirement
General	Wire-speed performance for concurrent services such as security and voice , and advanced services to multiple T1/E1/xDSL WAN rates Enhanced investment protection through increased performance and modularity Enhanced investment protection through increased modularity Increased density through High-Speed WAN Interface Card Slots (four) Enhanced Network Module Slot Support for over 90 existing and new modules Support for majority of existing AIMs, NMs, WICs, VWICs, and VICs Two Integrated 10/100/1000 Ethernet ports Optional Layer 2 switching support with Power over Ethernet (PoE) (as an option
Security	On-board encryption Support of up to 1500 VPN tunnels with the AIM-EPII-PLUS Module Antivirus defense support through Network Admission Control (NAC) Intrusion Prevention as well as stateful Cisco IOS Fire wall support and many more essential security features
Voice	Analog and digital voice call support Dedicated Extension Voice Module slot Optional voice mail support Optional support for Cisco CallManager Express (Cisco CME) for local call processing in stand alone business for up to48 IP Phones Optional support for Survivable Remote Site Telephony support for local call processing in small enterprise branch offices for up to 48 IP phones
DRAM	Default: 512 MB Maximum: 1 GB

Compact Flash	Default: 128 MB Maximum: 256 MB
Fixed USB 1.1 Ports	2 No.
Onboard LAN Ports	2-10/100/1000
Onboard AIM (Internal) Slot	2 No.
Network-Module Slot	1 slot, supports NM, NME and NME-X type modules
Extension Voice Module Slot	1 No.
PVDM (DSP) Slots on Motherboard	3 No.
Integrated Hardware-Based Encryption	Yes
VPN Hardware Acceleration (on Motherboard)	DES, 3DES, AES 128, AES 192, and AES 256
Interface Card Slots	4 slots, each slot can support HWIC, WIC, VIC, or VWIC type modules
Optional Integrated In-Line Power (PoE)	Yes, requires AC-IP power supply

ANNEXURE-VI

SPECIFICATION FOR VARIOUS SOFTWARE

Specification of Various Software	
Item	**Quantity**
a) Adobe Master Collection CS 5 AE	2 Users
b) Auto CAD 2010 AE	2 Users
c) SQL Server 2008 SNGL OLP NL AE	2 Users
d) Windows Server 2008 SNGL OLP NL AE	1 User
e) Quick Hill Anti Virus Admin Console Total Internet Security	300 Users
f) Microsoft Windows 7 Pro	10 Users
g) Abby Fine Reader OCR 10.0 Professional Edition	3 User
h) Mathlab 2010	2 User
i) Latex AE	2 Users

Proforma for the Price Bid

Sl. No.	SPECIFICATIONS	QTY	UNIT PRICE (Rs.)	TOTAL AMOUNT (Rs.)
01.	See Annexure-I	a) 35 No.	a)	
02	See Annexure-II	a) 1No b) 1 No c) 1 No. d) 1 No e) 2No.	a) b) c) d) e)	
03	See Annexure-III	a) 1 No. b) 1 No. b-1) 1No b-2) 1No b-3) 1No. b-4) 1No. c) 1 No d) 2 No.	a) b) b-1) b-2) b-3) b-4) c) d)	
04.	See Annexure-IV	a) 1 No. b) 1 No	a) b)	
05.	See Annexure-V	a) 1 No. b) 1 No. c) 1 No	a) b) **c)**	
06.	See Annexure-VI	ITEMS : a) 2 Users. b) 2 Users. c) 2 Users. d) 1 User e) 300 Users f) 10 Users g) 3 Users h) 2 Users i) 2 Users	a) b) c) d) e) f) g) h) i)	

Sd/- Registrar